

# Practice A

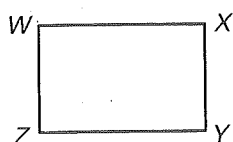
For use with pages 325–330

Complete the statement.

1. If a quadrilateral has four congruent sides, then it is a     ?.
2. If a quadrilateral has four right angles, then it is a     ?.
3. If a quadrilateral has four congruent sides and four right angles, then it is a     ?.
4. The diagonals of a rhombus are     ?.
5. The diagonals of a rectangle are     ?.

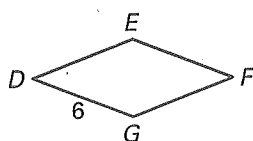
Use the diagram to complete the statement.

6. rectangle  $WXYZ$



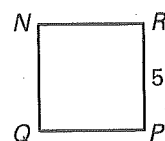
- a.  $m\angle W =$      ?
- b.  $m\angle X =$      ?
- c.  $m\angle Y =$      ?
- d.  $m\angle Z =$      ?

7. rhombus  $DEFG$



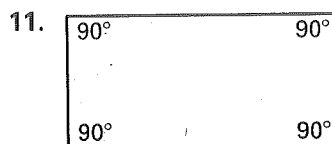
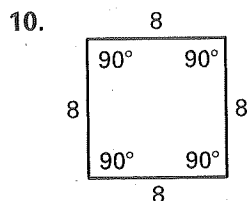
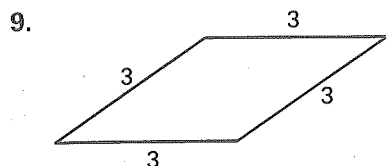
- a.  $DE =$      ?
- b.  $EF =$      ?
- c.  $FG =$      ?

8. square  $NRPQ$



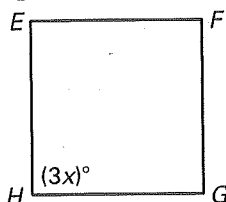
- a.  $m\angle R =$      ?
- b.  $PQ =$      ?
- c.  $QN =$      ?
- d.  $m\angle N =$      ?

Name the special quadrilateral using the information in the diagram.



Find the value of  $x$ .

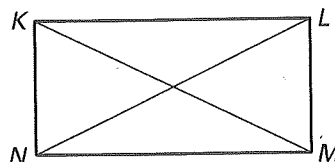
12. square  $EFGH$



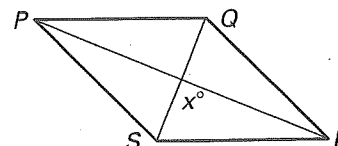
13. rectangle  $KLMN$

$$KM = 3x + 2$$

$$NL = 4x$$

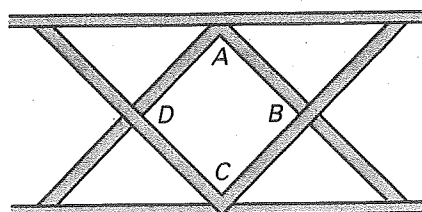


14. rhombus  $PQRS$



The figure at the right shows a portion of a pasture fence with parallelogram  $ABCD$ .

15. If  $AB = BC = CD = DA$ , name the special quadrilateral  $ABCD$ .
16. If  $m\angle A = m\angle B = m\angle C = m\angle D = 90^\circ$ , name the special quadrilateral  $ABCD$ .





# Practice B

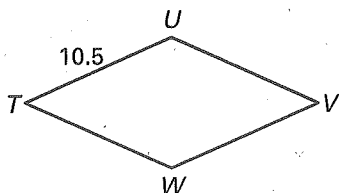
For use with pages 325–330

Write each theorem/corollary statement using symbols for quadrilateral  $ABCD$ .

1. If a quadrilateral has four congruent sides, then it is a rhombus.
2. If a quadrilateral has four right angles, then it is a rectangle.
3. If a quadrilateral has four congruent sides and four right angles, then it is a square.
4. The diagonals of a rhombus are perpendicular.
5. The diagonals of a rectangle are congruent.

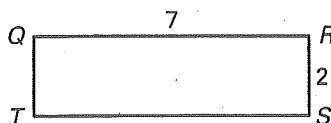
Find the measures.

6. rhombus  $TUVW$



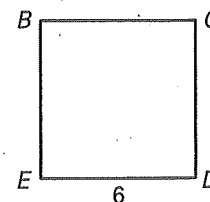
- a.  $UV = ?$
- b.  $VW = ?$
- c.  $WT = ?$

7. rectangle  $QRST$



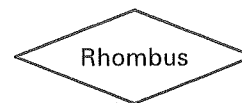
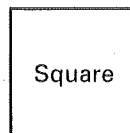
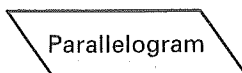
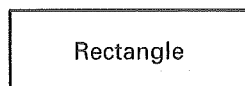
- a.  $m\angle Q = ?$
- b.  $TS = ?$
- c.  $QT = ?$

8. square  $BCDE$



- a.  $m\angle C = ?$
- b.  $BC = ?$
- c.  $CD = ?$

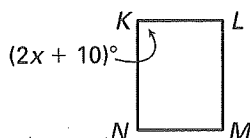
List each quadrilateral for which the statement is true.



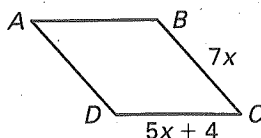
9. Opposite angles are congruent.
10. Diagonals bisect each other.
11. It has four congruent sides and four right angles.
12. It has four right angles.

Find the value of the variable.

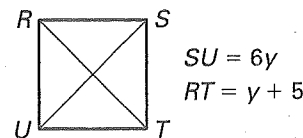
13. rectangle  $KLMN$



14. rhombus  $ABCD$



15. square  $RSTU$



$$\begin{aligned} SU &= 6y \\ RT &= y + 5 \end{aligned}$$

16. You want to make a diamond-shaped frame for a wall hanging out of a 52-inch bamboo stick. If the diamond is to be a square, how long can the sides be? What should be true about the distances between the opposite corners?

